

WHAT IS CLAIMED IS:

1. A wireless radio terminal for transmitting and receiving packets over a wireless network, comprising:
 - a first access request signal generator for generating a first access request signal,
 - a second access request signal generator for generating a second access request signal,

wherein said first access request signal generator is adapted to transmit said first access request signal on a first channel, said first channel having a duration equal at least to the duration of said first access request signal plus a maximum timing uncertainty between unsynchronized terminals, and

wherein said second access request signal generator is adapted to transmit said second access request signal on a second channel within a second window having a duration less than the duration of said first window.
2. A wireless radio terminal as in claim 1, wherein said first channel is equal in duration to an integer number of time slots, at least equal to two time slots.
3. A wireless radio terminal as in claim 1, wherein said second channel has a duration equal to an integer number of time slots.
4. A wireless network as in claim 3, wherein said second channel is within the frequency range associated with traffic channels.
5. A wireless network as in claim 4, wherein said second channel has a bandwidth less than one half of the bandwidth of said traffic channels.
6. A wireless network as in claim 4, wherein said second channel has a bandwidth less than one third of the bandwidth of said traffic channels.

7. A wireless network as in claim 4, wherein said second channel has a bandwidth less than one fourth of the bandwidth of said traffic channels.
8. A wireless network having a plurality of broadband channels, a first contention channel having a duration equal at least to the duration of a RACH message plus a maximum timing uncertainty, and a second contention channel having a duration which is less than the duration of said first contention channel.
9. A wireless network as in claim 8, wherein said first contention channel is within a control channel.
10. A wireless network as in claim 8, wherein said second contention channel is within the frequency range associated with traffic channels.
11. A wireless network as in claim 10, wherein said second contention channel has a bandwidth less than one half of the bandwidth of said traffic channels.
12. A wireless network as in claim 10, wherein said second contention channel has a bandwidth less than one third of the bandwidth of said traffic channels.
13. A wireless network as in claim 10, wherein said second contention channel has a bandwidth less than one fourth of the bandwidth of said traffic channels.
14. A method of transmitting access request signals in a wireless network, said method comprising the steps of:
receiving a beacon signal from said network identifying a time frame,
dividing a communication channel into a plurality of subchannels, said channel having a continuous range of frequencies,

transmitting a first electromagnetic signal in a first one of said plurality of subchannels during a first of a plurality of time slots, said first electromagnetic signal having a duration less than one of said time slots,

abstaining from transmitting electromagnetic signals on said first subchannel during at least a second of said plurality of time slots,

receiving timing correction information from said network,

based on said timing correction information, transmitting a second electromagnetic signal in a second one of said plurality of subchannels during a third of said plurality of time slots, said second electromagnetic signal having a duration less than one of said time slots.

15. The method of claim 2, further comprising the steps of:

receiving traffic channel assignment data from said network, said traffic channel assignment containing data representing a particular time slot,

transmitting data during said particular time slot on a traffic channel comprising a continuous set of frequencies allocated to said subchannels.